

### Listing of Claims:

1. (Currently Amended) A method (40) for determining the ~~behavior~~ behaviour patterns of the users of a telecommunication system on the basis of information collected from the system, characterized in that

at least one variable or a combination of variables (41) of the telecommunication system is defined,

user-specific information (43) corresponding to the defined at least one variable or a combination of variables is filtered from the information collected from the telecommunication system, and

the users of the telecommunication system are classified on the basis of the filtered user-specific information (45) into various classes indicative of a user's behaviour patterns during use of the telecommunication system.

2. (Currently Amended) A The method (40) ~~according to Claim of claim~~ 1, characterized in that said user-specific information is filtered from the telecommunication system in real time.

3. (Currently Amended) A The method (40) ~~according to Claim of claim~~ 1, characterized in that after said filtering (43) of information the filtered information is saved (44) for later analysis.

4. (Currently Amended) A The method (40) ~~according to Claim of claim~~ 1, characterized in that after the classification (45), statistical analysis (46) is carried out on the classified information.

5. (Currently Amended) A The method (40) ~~according to Claim of claim~~ 4, characterized in that parameters essential for the quality of service of the telecommunication system are regulated on the basis of said statistical analysis (46).

6. (Currently Amended) A The method (40) ~~according to Claim of claim~~ 4, characterized in that wherein on the basis of said statistical analysis, conclusions (47) are drawn about the behaviour of a certain group of users in a telecommunication system.

7. (Currently Amended) A The method ~~(40) according to Claim of claim~~ 1, characterized in that the classes of behaviour patterns used in the classification of users are defined in connection with the definition of variables ~~(41)~~.

8. (Currently Amended) A The method ~~(40) according to Claim of claim~~ 1, characterized in that the definitions of the classes of behaviour patterns used in the classification of users are changed ~~(48)~~.

9. (Currently Amended) A The method ~~(40) according to Claim of claim~~ 8, characterized in that said filtered unclassified information is classified into said new classes of behaviour patterns ~~(49)~~.

10. (Currently Amended) A The method ~~(40) according to Claim of claim~~ 1, characterized in that at least one of the variables is the type of contact of the user.

11. (Currently Amended) A The method ~~(40) according to Claim of claim~~ 1, characterized in that at least one of the variables is the type of system service.

12. (Currently Amended) A The method ~~(40) according to Claim of claim~~ 1, characterized in that said telecommunication system is a mobile communication system ~~(40)~~.

13. (Currently Amended) A system ~~(50)~~ for determining the users' patterns of behaviour in a telecommunication system, characterized in that said system ~~(50)~~ comprises at least means ~~(51)~~ for defining at least one variable or a combination of variables of the telecommunication system,

filtering means ~~(53)~~ for filtering said user-specific information corresponding to at least one variable or a combination of variables from the information received from the telecommunication system, and

classifying means ~~(55)~~ for classifying the users of the telecommunication system on the basis of said filtered user-specific information into various classes

indicative of a user's behaviour patterns during use of the telecommunication system.

14. (Currently Amended) A The system (50) according to Claim of claim 13, characterized in that the system is designed to process the information received from the telecommunication system in real time.

15. (Currently Amended) A The system (50) according to Claim of claim 13, characterized in that the system has a memory (51) for saving said filtered user-specific information.

16. (Currently Amended) A The system (50) according to Claim of claim 13, characterized in that the system has analysis means (56) for statistical analysis of the classification of the behaviour patterns of users received from the classifying means (55) and/or for defining new classes of behaviour patterns.

17. (Currently Amended) A The system (50) according to Claim of claim 13, characterized in that the system (50) has regulating means for regulating the values of parameters essential for the quality of service of the telecommunication system on the basis of the information received from the analysis means (56).

18. (Currently Amended) A The system (50) according to Claim of claim 13, characterized in that said telecommunication system is a mobile communication system (40).

19. (New) A telecommunication system for determining the behaviour patterns of users of the telecommunication system on the basis of information collected from the system, comprising:

at least one base station;

at least one mobile services switching center (MSC) for establishing a connection to a mobile station and generating connection information;

at least one network management system (NMS) for monitoring and managing operation of the telecommunication system;

a customer register for receiving the connection information from the at least one MSC;

a statistical unit for receiving statistical information from the at least one NMS;

a filter configured to filter said user-specific information corresponding to at least one variable or a combination of variables from the information received from the telecommunication system, said at least one variable or a combination of variables being defined in the telecommunication system; and

a classifier configured to classify the users of the telecommunication system on the basis of said filtered user-specific information into various classes indicative of a user's behaviour patterns during use of the telecommunication system.

20. (New) The telecommunication system of claim 19, wherein the system is configured to process the information received from the telecommunication system in real time.

21. (New) The telecommunication system of claim 19, further comprising:  
a memory for saving said filtered user-specific information.

22. (New) The telecommunication of claim 19, further comprising:  
an analyzer s for at least one of statistical analysis of the classification of the behaviour patterns of users received from the classifier and defining new classes of behaviour patterns.

23. (New) The telecommunication system of claim 19, further comprising:  
a regulator for regulating the values of parameters essential for the quality of service of the telecommunication system on the basis of the information received from the analysis means.

24. (New) The telecommunication of system claim 19, wherein said telecommunication system is a mobile communication system.

25. (New) A computer-readable medium for determining the behaviour patterns of users of a telecommunication system based on information collected from the system, the computer readable-medium being encoded with a computer program, said computer program comprising

- program code for defining at least one variable or a combination of variables of the telecommunication system,
- program code for filtering said user-specific information corresponding to at least one variable or a combination of variables from the information received from the telecommunication system, and
- program code for classifying the users of the telecommunication system on the basis of said filtered user-specific information into various classes indicative of a user's behaviour patterns during use of the telecommunication system.